

# PREDICTIVE POLICING

## Best Practices and Training Guide

Revised: May 30 2014

# Overview

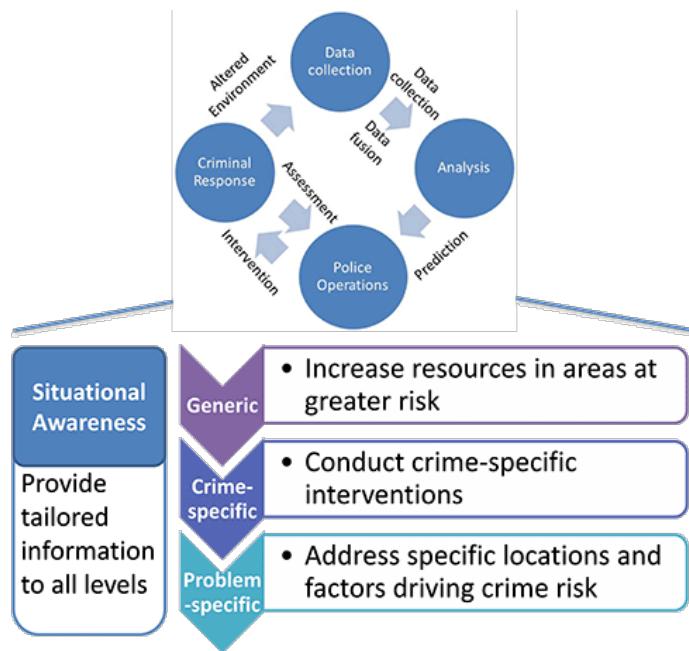
## Company Overview

PredPol is a Software as a Service startup. We provide law enforcement agencies like local Police and Sheriff Departments with information that helps them predict crime in their area. Our tool is given crime data consisting of what, when, and where by the agency. This information is run through an algorithm and then provides 500x500 ft prediction boxes on a map for the agency. These prediction boxes show them what crime types are at a high risk of occurring in this area. Police patrol that area to prevent the crime from happening.

## Predictive Policing Overview

“Predictive Policing uses statistical techniques to identify promising targets for police intervention with the goal of... preventing crime. Predictive policing methods can allow police to work more proactively-with limited resources-to develop effective strategies that will prevent crime.... However, predictive methods [are] not the equivalent to...a crystal ball.”

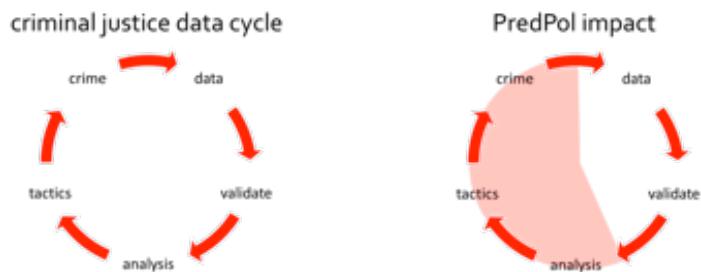
“Predictive policing uses computer models, supported by prior crime and environmental data, to anticipate risk of crime and inform actions to prevent crime.”



Walter Perry et al., “Predictive Policing: What It Is, What It Isn’t and How It Can Be Useful,” *The Police Chief* 81 (April 2014): 30–35

## PredPol Tool Overview

PredPol is designed to fit seamlessly into the criminal justice data cycle and policing practice.



The criminal justice data cycle actively connects many parts of the law enforcement agency:

- Patrol & investigative officers respond to crime

- Officers collect data about crime events
- Crime data is validated and aggregated by IT services
- Analysts work with crime data to detect patterns
- Command staff utilizes crime patterns to develop tactical responses
- Patrol & crime prevention officers use their knowledge, skills & experience to implement tactical directives
- Activity in the field deters & disrupts crime

PredPol enhances the criminal justice data cycle via its role in crime analysis, tactical planning and identifying key hotspots for field-based problem solving and crime prevention.

- PredPol makes crime prediction fast & immediately available.
- PredPol predictions offer clear tactical directives.
- PredPol identifies hotspot locations where the knowledge, skills & experience of the officer may have the greatest impact.

# Getting Started

## Getting to Know PredPol

Day-to-day use of PredPol is straightforward:

- Access the PredPol system & login via a secure web site
- Select your prediction options for each watch or shift
- One click generates your prediction reports
- Supervisors brief patrol on PredPol goals
- ‘Get in the Box’ to prevent crime

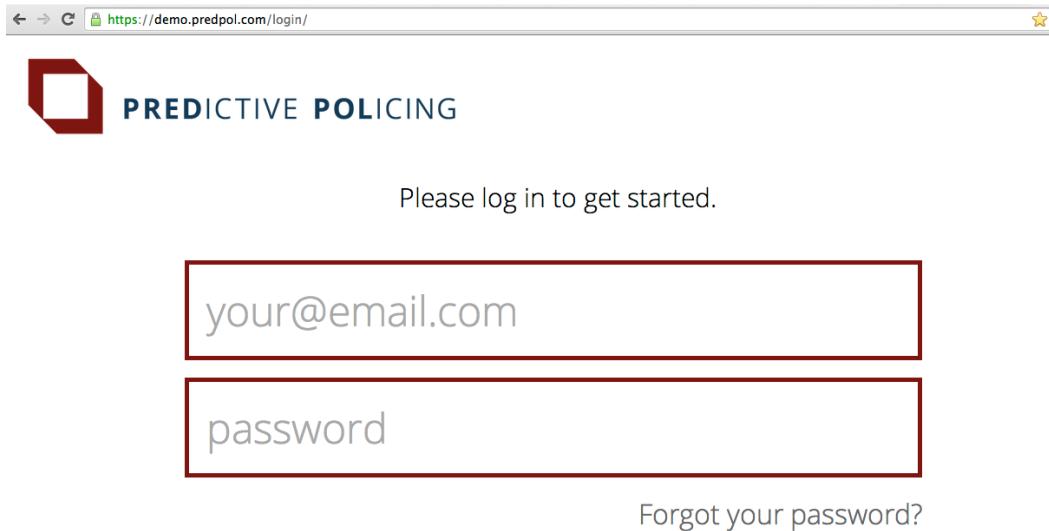
Since PredPol is continuously updated, you also have the option of accessing predictions on-demand from any device, anywhere, at any time.

## Using PredPol

**Accessing the PredPol System** is as easy as navigating your dedicated, secure website.

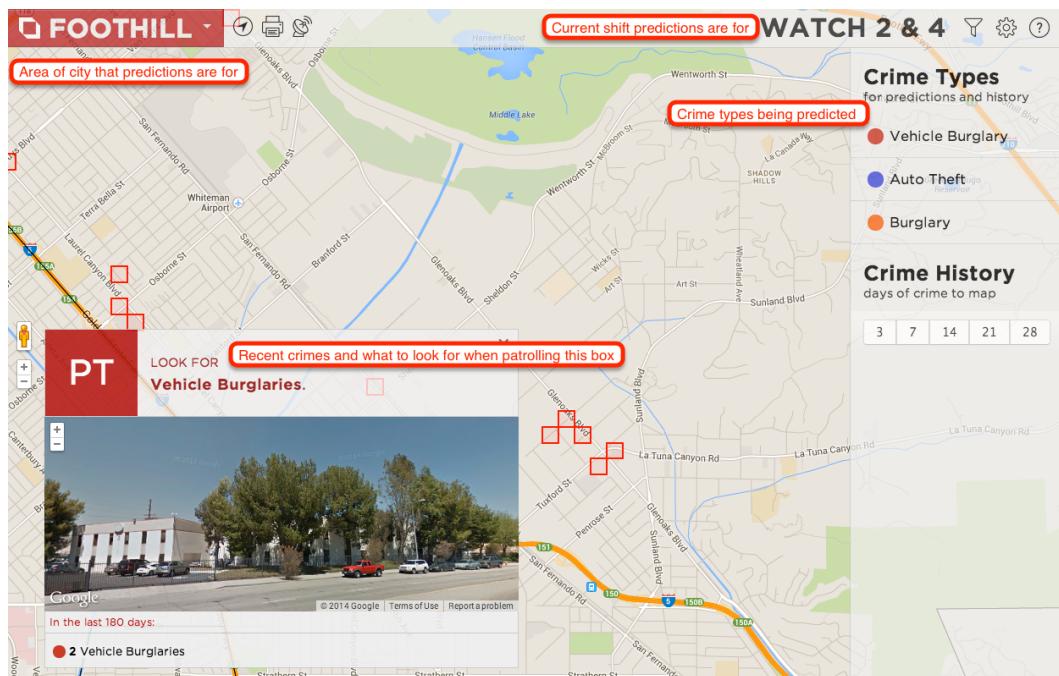
Enter <https://YOURCITY.predpol.com> into your address bar using any modern browser.

To login, use your work email address and the password you have selected via the link emailed to you initially.



After you log in for the first time you will be asked to change your password to one of your choice.

**The User Interface** lets you quickly set options and generate prediction reports.



**Prediction & Crime Mapping Options** are changeable with the click of the mouse.

open settings



toggle settings



close settings



You can easily **export PredPol reports in several different formats and by date.**

Click on the beat name, date, or shift to change to the report criteria. Dates that have already passed can be accessed in this method.

Click the Download drop down, and choose from any of our supported formats including:

PDF: For easily exchanging copies of the report document

KML: For viewing PredPol predictions in GIS applications like Google Earth, ArcGIS, or any other application that accepts geo data

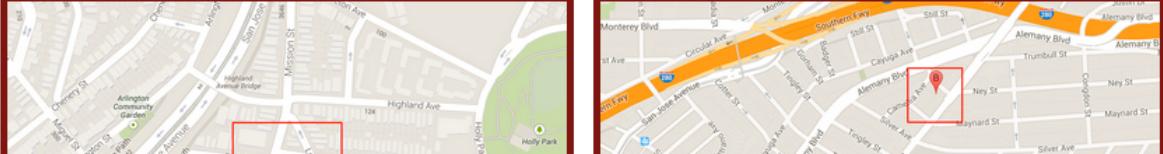
ESRI ShapeFile: For legacy ESRI ArcGIS systems that do not support KML, you can download a ShapeFile.

CSV: For exporting data in a simple, easy format that can be used for archival or analysis purposes

INGLESIDE ▾ MAY 30, 2014 ▾ DAY ▾ DOWNLOAD

**INGLESIDE PredPol** May 30, 2014 / Day  
All Except Traffic

A Near 3700 Block Of Mission St	B Near 4200 Block Of Mission St	C Near Mission St And Avalon Av	D Near 4500 Block Of Mission St
E Near 4600 Block Of Mission St	F Near 4600 Block Of Mission St	G Near 4700 Block Of Mission St	H Near Geneva Av And Mission St
I Near 1700 Block Of Sunnydale Av	J Near 0 Block Of Brookdale Av		



# Deploying PredPol

## Best Practices

- Live data feed 95% of days (PD must maintain RMS connection)
- Command staff & supervisor buy-in (must commit to make a part of daily routine)
- PredPol training (recommended)
- Access to site daily or automated delivery and access of reports (minimum 75% or 5 of 7 days per week)
- Daily distribution of missions to field units
- Deployment of system for dosage tracking (e.g., AVL, GPS, iPads)
- Minimum average dosage of 30 minutes per day per box (70 hours per week for 20 boxes) with higher dosage delivered when possible (max observed is 250 hours per week for 20 boxes)
- Ideal dosage is 15 minutes every two hours (Koper Curve)
- Available time policing (recommended)
- Tactical flexibility to allow officers to ‘police what they see’ (recommended)

## Get in the Box

PredPol is where policing best-practice meets the precision of crime prediction. Here’s how practice and prediction fit together:

- Knowing where and when crimes are likely to occur is the first step in successfully deterring and disrupting crime. The next step

is deploying police resources where expert knowledge, skills and experience can be used to greatest effect.

- PredPol does not ‘dazzle’ with distracting visualizations that are hard to know how to use.
- The tactical directive from PredPol is clear: ‘Get in the Box’ to have the best chance of disrupting and deterring crime.
- Use your knowledge, skills and experience to do problem solving ‘in the box’.

### **1. ‘Get in the Box’ during discretionary time...**

Discretionary time is the time that patrol officers have between handling calls-for-service and are ‘clear’ to receive calls as the need arises. With PredPol predictions in-hand, officers can quickly locate the nearest prediction and ‘Get in the Box’.

### **2. Position dedicated resources ‘in the box’...**

Dedicated resources might be crime suppression teams, community service or reserve officers, or specialized patrol units. These resources may be explicitly positioned for problem solving ‘in the box’.

### **3. Problem-oriented policing ‘in the box’...**

Crime in a specific place is often the result of problems unique to that place. Problem Oriented Policing (POP) suggests that diagnosing and solving these problems goes a long way to eliminating the opportunity for crime. For example, installing metal ‘clips’ on walkway handrails is a simple way to stop skateboarders from destroying property. ‘Get in the Box’ and use the SARA model at a micro-scale: Scan for immediate crime & disorder problems; Analyze local causes of the problem; Respond to the problem with environmental modifications or community engagement; Assess the effectiveness of solutions.

### **4. Broken-windows policing ‘in the box’...**

Under broken-windows policing, misdemeanor crimes are seen as the gateway to more serious crimes. Problem solving ‘in the box’ that is oriented towards reducing misdemeanor crime may also reduce felony crime.

### **5. Intelligence-led policing ‘in the box’...**

So-called ‘impact players’ are responsible for a large percentage of the crime occurring in any community. Combine PredPol predictions with intelligence you may have about your impact players to disrupt their criminal opportunities.

## **6. Community policing ‘in the box’...**

PredPol boxes are small, but they represent locations of high-risk for the communities that live within and adjacent to them. ‘Get in the box’ to build community partnerships to fight crime at the micro-scale. Interacting with people who live, or business owners who operate within prediction hotspots and giving them clear information about the risks they may face. It puts residents and business owners in the best position to naturally deter crime and call for service in a timely and effective manner.

# FAQ for Command Staff

## **What is a PredPol box?**

PredPol assigns probabilities to locations where crime is most likely to occur and designates the highest probability locations with distinctive red box. When you ‘Get in the Box’ you know that you have entered a high-probability crime area.

## **Why doesn’t the PredPol box tell me what type of crime is likely to occur there?**

PredPol predictions can put you in the right place at the right time, but they are not a replacement for your knowledge, skills and experience. You are most effective when you are using your problem solving abilities to deal with the causes of crime in each local situation.

## **Why are the boxes so small?**

PredPol boxes are just the right size to capture the locations that are at greatest risk of crime, but are not so large that you start mixing into the box locations that are not really at risk.

Sometimes it’s just one or two houses that are at risk, or a few parking spaces. Why include a whole neighborhood or even a whole block when PredPol can make it much more precise for you?

## **If PredPol is a way of ‘policing the probabilities’ isn’t this just the same thing as taking a gamble or playing a hunch?**

PredPol is not a guess or a hunch. Predictions are based on hard data about where crimes have occurred, both recently and farther back in time, and uses mathematical models to tell you where the most likely locations for crime to occur today.

## **How do I get my patrol officers motivated to ‘Get in the Box’?**

Nobody knows your team better than you do, but there are some ways in which one can motivate PredPol missions:

- ‘Get in the Box’ is a quick turn of phrase that can be repeated often to remind officers of their goals.
- PredPol is not arrest driven, but if you do get arrests ‘in the box’ let the officers ‘tell their story’ and encourage them to spread the word.

## **Does PredPol replace officer judgment & experience?**

Absolutely not! Officer judgment is critical to problem solving ‘in the box’.

PredPol will help new officers to more quickly understand the nature of crime risk in their environment. It will help veterans look at their policing environment in a new way. And, since

PredPol predictions may change from day to day, getting ‘in the box’ may help officers avoid falling into routine patrol patterns.

### **Is PredPol probable cause?**

PredPol is not probable cause. It is a precision way of defining micro-scale ‘high crime areas’ based on your crime data. High crime areas may be grounds for further investigation, but additional objective evidence must always accompany reasonable suspicion and probable cause.